IN THE UNITED STATES DISTRICT COURT

FOR THE EASTERN DISTRICT OF TEXAS

MARSHALL DIVISION

TOUCHCOM, INC., ET AL.	§	
Vs.	§	CIVIL ACTION NO. 2:04-CV-246
DRESSER, INC.	§	

MEMORANDUM OPINION AND ORDER

The court grants the defendant's motion for summary judgment for claim invalidity based on indefiniteness (#157) for the reasons expressed in this order.

1.   Introduction.

This patent infringement case presents issues of claim invalidity for indefiniteness bound up in issues of claim construction. The questions are whether certain software limitations are drafted according to 35 U.S.C. § 112 ¶ 6 and, if so, whether the specification discloses corresponding structure in the form of algorithms. The defendant's motion is well-taken, and the court will render a summary judgment of invalidity and dismiss this case.

2.   Background.

The technology in this case relates to pumps–primarily those which dispense fuel. United States Patent No. 5,027,282 ("the '282 patent") describes a user-friendly pump system which includes a display and input means connected to a pump means. In the preferred embodiment described in the patent, the display and input means comprises a touch screen display with attendant electronics. The pump and display and input means are connected to a computer concurrently

running software controlling the pump and the display and input means. Thus, the user-friendly

pump is capable of, for example, fueling the vehicle while simultaneously performing other tasks,

such as asking whether the user also wants to purchase a car wash.

The patent includes only one independent claim.   Claim 1 provides:

1.   An interactive pump system capable of interacting with and responding to
responses from a user, the system comprising:

a pump means;

a central processing unit connected to the pump means; and

a display and input means including a plurality of instruction displays, and being
connected to the pump means and the central processing unit;

wherein the pump means is operable to transmit transaction data, concerning fluid
pumped, to the display and input means which will display the transaction data,
display one instruction display and transfer input responses from a user to the central
processing unit, the central processing unit being operable to process the input
responses and to control the pump means according to the responses;

characterised in that the central processing unit includes pump task means, *display
and input task means* and *application task means*, each task means, in operation
running concurrently with the other task means, with the pump task means
controlling the pump means, *the display and input task means controlling the display
and input means*, and *the application task means receiving and processing the input
responses and transferring results into pump directions to the pump task means*.

The court must determine whether the "display and input task means" and "application task

means" are means-plus-function limitations. If they are, the court must then determine whether

sufficient structure is disclosed in the '282 patent for performing the claimed functions.

3.   **Discussion.**

A.   **General Principles.**

The motion for summary judgment challenges the validity of a United States Patent. The law

presumes the validity of the patent, and it is Dresser's burden to demonstrate, by clear and convincing evidence, that the patent is invalid. 35 U.S.C. § 282; *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003). Where, as here, the question is whether the patent is indefinite for failure to disclose corresponding structure, the inquiry becomes a question of law, governed by principles of claim construction. *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1302 (Fed. Cir. 2005); *Atmel Corp. v. Info. Storage Devices*, 198 F.3d 1374, 1378 (Fed. Cir. 1999)("A determination of claim indefiniteness is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims.").

The relevant statute is 35 U.S.C. § 112 ¶ 6. That statute provides:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112 ¶ 6. In *Default Proof*, the Federal Circuit addressed indefiniteness in the context of a means-plus-function limitation and supplied the rules which govern the present issues:

> "[I]f one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc).
>
> . . . .
>
> This duty to link or associate structure to function is the quid pro quo for the convenience of employing § 112, ¶ 6. *See O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1583 (Fed. Cir. 1997). "Fulfillment of the § 112, ¶ 6 trade-off cannot be satisfied when there is a total omission of structure." *Atmel*, 198 F.3d at 1382. While corresponding structure need not include all things necessary to enable the claimed invention to work, it must include all structure that actually performs the recited function. *See Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119

(Fed. Cir. 2002).

Default Proof, 412 F.3d at 1298. Bearing these rules in mind, the court turns to the issues presented

in this case.

      B.   Whether the limitations are drafted according to § 112 ¶ 6.

      The first question is whether the relevant limitations are drafted according to § 112 ¶ 6. The

pertinent limitations are the "display and input task means" and the "application task means"

limitations. Each uses the word "means," and cardinal rules of claim construction support Dresser's

position that § 112 ¶ 6 presumptively applies. *Apex v. Raritan Computer, Inc.*, 325 F.3d 1364, 1371

(Fed. Cir. 2003). The burden is therefore on Touchcom to demonstrate that the presumption has

been rebutted. *See Apex*, 325 F.3d at 1372.

      The presumption may be rebutted if the claim language recites sufficient structure or material

for performing the claimed function. *Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1347

(Fed. Cir. 2002); *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 531 (Fed. Cir. 1996). The Federal

Circuit has concluded in several cases that claim language which uses the term "means" is

nonetheless outside of § 112 ¶ 6 if the language otherwise recites sufficient structure for performing

the claimed function. For example, in *Cole*, the court held that "perforation means" recited sufficient

structure (perforation) for performing the function claimed in the limitation. The court held that the

limitation was outside the scope of § 112 ¶ 6 due to the use of perforation immediately before the

term "means." According to the court, the word "perforation" connoted sufficient structure to one

of skill in the art to remove the limitation from § 112 ¶ 6. Even though the patentee had used the

word "means" several times in the claims, the court found no reason to construe these limitations

pursuant to § 112 ¶ 6.

In *Envirco Corp. v. Clestra Cleanroom, Inc.*, 209 F.3d 1360, 1364-65 (Fed. Cir. 2000), the court held that the term "second baffle means" was not subject to § 112 ¶ 6. The patent related to a fan and filter set for use in clean rooms and required in one of its limitations "*a second baffle means* disposed radially outwardly of said centrifugal fan means and said first baffle means, said second baffle means having inner surfaces for directing the airflow from said centrifugal fan means . . . ." The Federal Circuit, relying on *Cole*, held that the term "baffle" itself is a structural term. As a result, the court found the limitation outside the scope of § 112 ¶ 6.

Finally, in *Allen Engineering*, the court held that the terms "gearbox means," "pivot steering box means," and approximately ten other means terms were not subject to § 112 ¶ 6 because the claim language recited sufficient structure for performing the function. The court likened the case to *Cole* and held that only one of the limitations that used the word "means" invoked § 112 ¶ 6.

In this case, Touchcom points to this precedent and asserts that one of skill in the art would recognize that the term "task" refers to software or a software module. Moreover, Touchcom contends that "task" when modified by "display and input" or "application" connotes sufficient structure to take the case out of the jaws of § 112 ¶ 6. Touchcom bolsters its position with the argument that while the patentee used the word "means" several times, there was a modifier directly before the word. In addition, Touchcom argues that the patentee never used the terms "means for" as is typically done in patent drafting to signal a § 112 ¶ 6 limitation.

Dresser's answer to this is *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363 (Fed. Cir. 2003). In *Altiris*, the court, in the context of a software issue, distinguished *Cole*, *Envirco*, and *Allen Eng'g*, by stating:

> In the cases where we have found sufficient structure in the claims, the claim

language specifies a specific physical structure that performs the function. Here, merely pointing out that the relevant structure is software rather than hardware is insufficient. As stated above, because "commands" (i.e., software) is so broad as to give little indication of the particular structure used here and is described only functionally, one must still look to the specification for an adequate understanding of the structure of that software. This is unlike the cases cited above, wherein the exact structure used to accomplish the function appears in the claim language. For this reason, we uphold the court's determination that the presumption that the claim is a means-plus-function claim was not rebutted.

Altiris, 318 F.3d at 1376 (internal citations omitted). According to Dresser, even if the court accepted Touchcom's argument–that "display and input task" or "application task" connotes a type of software structure–that language still does not connote specific structure like the limitations confronted in *Cole*, *Envirco*, and *Allen Eng'g*.

Dresser is correct. The patentee used the word means and presumptively invoked § 112 ¶ 6. The descriptions of the software modules are too generic to connote specific structure, and, given the language in *Altiris*, the court must reject Touchcom's arguments to the contrary. The limitations are drafted pursuant to § 112 ¶ 6.

C.   Whether the patent discloses corresponding structure.

The court has concluded that "application task means" and "display and input task means" must be construed under § 112 ¶ 6. The next issue is whether the patent discloses corresponding structure. The parties agree that, as software limitations, *WMS Gaming, Inc. v. Int'l Game Tech.,* 184 F.3d 1339, 1348-49 (Fed. Cir. 1999) and *Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1253 (Fed. Cir. 2005), require that the structure for performing the function is the algorithm identified in the specification and equivalents. The parties divide over the issue whether the patent disclosure satisfies the requirements of *WMS Gaming* and *Harris*.

Dresser argues for a finding of indefiniteness by pointing to the undisputed fact that large

portions of the source code are missing from Schedule A. The various code modules are listed in

alphabetical order in the '282 patent at columns 31-47. However, in the actual code section of the

patent, at column 1341, the source code ends part of the way through through the "P" or "pump"

section. Thus, a portion of the "P" section, all of the "S" section (for switches) and the "T" section

(for touch) are missing. Dresser contends that the patentee did not provide flow charts, mathematical

formulas, or other detailed descriptions of the algorithms at issue; therefore, Dresser maintains that

Touchcom is stuck with the source code (or lack thereof) that is actually appended to the patent. For

its part, Touchcom asserts that the patent discloses sufficient corresponding structure. Ultimately,

the court is persuaded by Dresser's arguments.

The first limitation is the "display and input task means." The corresponding function is

"controlling the display and input means." The input means controlled by the input task means is,

under the preferred embodiment of the patent, a touch screen. The source code related to the "touch"

feature therefore enjoys considerable relevance to this case. Unfortunately, that portion is missing,

and the specification does not otherwise provide a sufficient description of the algorithm

corresponding to the claimed function of controlling the input means.

Touchcom asserts that the specification describes structure for "controlling the input means"

at col. 1, ll. 60-67. There, the patent states:

> The central processing unit can concurrently run separate tasks controlling the pump
> means and the display and input means . . . . The means of control may include the
> transfer of commands to, and receiving of responses from, the . . . display and input
> means.

Touchcom asserts that the algorithm for controlling the input means is disclosed by the

underlined text. The court disagrees. The pertinent claim language requires the structure to

"control" the display and input means. Touchcom does not explain how this portion of the specification discloses sufficient structure to *control* the input means. The algorithm for controlling the input means would presumably be located in the portion of the source code addressing the touch means, but that portion is missing. The general description found in the Summary of the Invention is insufficient.

For similar reasons, the court rejects Touchcom's arguments that the Detailed Description supplies the algorithm by explaining the transfer of commands to and from the input means. Touchcom urges that a section entitled "TOUCH CIRCUIT" provides detailed command codes for controlling the input means. Further, Touchcom urges that the touch task 1321 controls the touch electronics by transferring commands to the touch electronics, which, after executing a command, returns a three character acknowledgment string to the PC. Although these passages illustrate communications between the PC and the touch electronics, they fall short of explaining how the task means controls the input means. The relevant claim language requires control, not simply communication. As a consequence, these passages fail to supply the missing structure.

Finally, Touchcom asserts that the algorithm for controlling the input means is known in the art. In its briefing, Touchcom contends that the '282 patent states that a particular brand of input device–Microtouch branded touch electronics–can be employed as the input means. Touchcom contends that the software to control the Microtouch may be downloaded from 3M's website. As such, Touchcom asserts that one of skill in the art would know the particular algorithm corresponding to the input task means.

The court rejects this argument as well. These drivers are not sufficiently disclosed and referenced in the specification to supply the corresponding structure for controlling the input means.

See Amtel Corp. v. Info Storage Devices, Inc., 198 F.3d 1374, 1381-82 (Fed. Cir. 1999). There is

no structure in the '282 patent, in the form of an algorithm, which corresponds to the function of

controlling the display and input means.

The second limitation is the "application task means." The parties agree that if the court

construes the term according to § 112 ¶ 6, then the function is "receiving and processing the input

responses and transferring results into pump directions to the pump task means." In the context of

this claim limitation, "transferring" means "transforming or changing." The pump interface portion

of the source code is missing. Dresser therefore contends that the patent discloses no corresponding

algorithm for performing the function of transforming or changing results into pump directions.

Again, Touchcom argues that the '282 patent discloses sufficient structure for performing this

function.

First, Touchcom argues that the '282 patent discloses an algorithm comprising the steps of

(1) receiving input; (2) recognizing the input; and (3) determining next steps based on recognition

of the input and generating requests to be sent to the pump task. Dresser responds, however, and the

court agrees, that these three steps are insufficient to perform the entire function found in the claim

language. It must be remembered that the claim language requires "transforming" or "changing,"

and this three step algorithm lacks sufficient detail to account for the transforming or changing
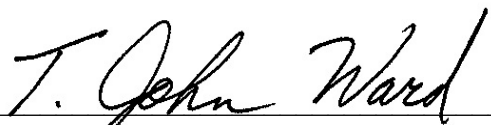
function required by the claim.

Second, Touchcom argues that despite the admitted gaps in the pump interface code, one of

skill in the art would understand the first portion of Schedule A to disclose an algorithm (albeit a

generic one) sufficient to permit the application task to transform results into pump directions. The

court disagrees. It is the patentee's burden to clearly link and associate corresponding structure with

the claimed function. That one of skill in the art could create structure sufficient to perform a function is not the inquiry. The court holds that the patent fails to disclose structure sufficient to perform the function of transferring results into pump directions.

4.   Conclusion.

The '282 patent fails to include sufficient structure for performing the functions of "controlling the display and input means" and "transferring results into pump directions." It bears mention that Touchcom's positions on these issues have evolved over the course of this case. The court has considered carefully all of Touchcom's arguments, including those presented for the first time at oral argument. Standing alone, the fact that a litigant changes its position on corresponding structure is not fatal. In this case, however, that fact reflects a considerable struggle to locate reasonable substitutes for code which should have been included in Schedule A, but is not. This court cannot supply the missing source code through the means asserted by Touchcom. The claims of the '282 patent are indefinite as a matter of law, and the court declares them invalid. Dresser's motion for summary judgment is granted. All other pending motions are denied as moot.

SIGNED this 5th day of December, 2005.

_____
T. JOHN WARD
UNITED STATES DISTRICT JUDGE